

PHENIX WEEKLY PLANNING



2/28/2013
Don Lynch

This Week

TECHNICAL
SUPPORT
2013

- Run 13 Continues
- Rack Room AC Control Upgrade
- No maintenance access this week
- Continue VTX strip pixel stave re-design
- Continue sPHENIX support
- Continue MPC-Ex design

Next Week

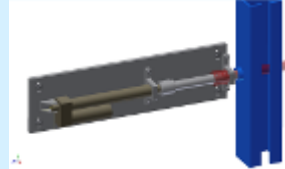
- Run 13 Continues
- Complete Rack Room AC Control Upgrade ?
- Wednesday 1st scheduled maintenance day Wednesday 3/6
 - Remove FVTX rad monitors ?
 - Close FVTX/VTX ?
 - Other tasks ?
- Continue VTX strip pixel stave re-design
- Continue sPHENIX support
- Continue MPC-Ex design

Window Washer Remote Pin Removal and Winch/spooler safety upgrades



South Side pin

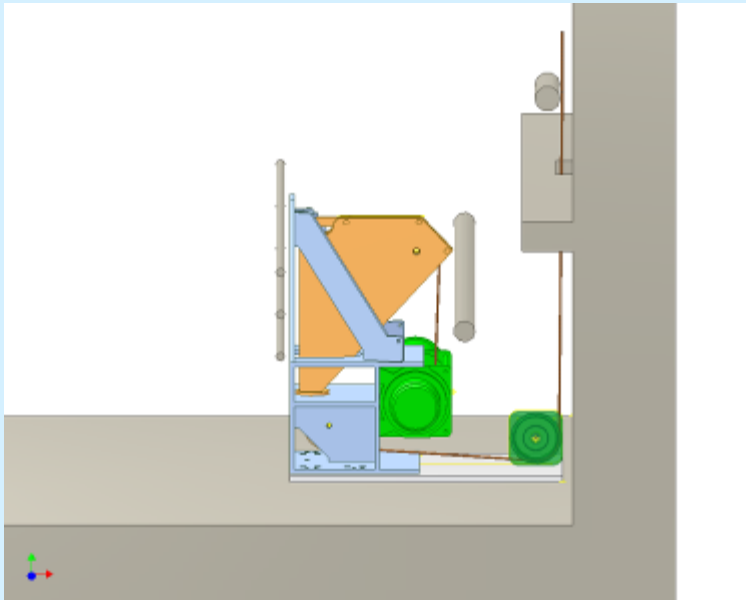
Limit switch



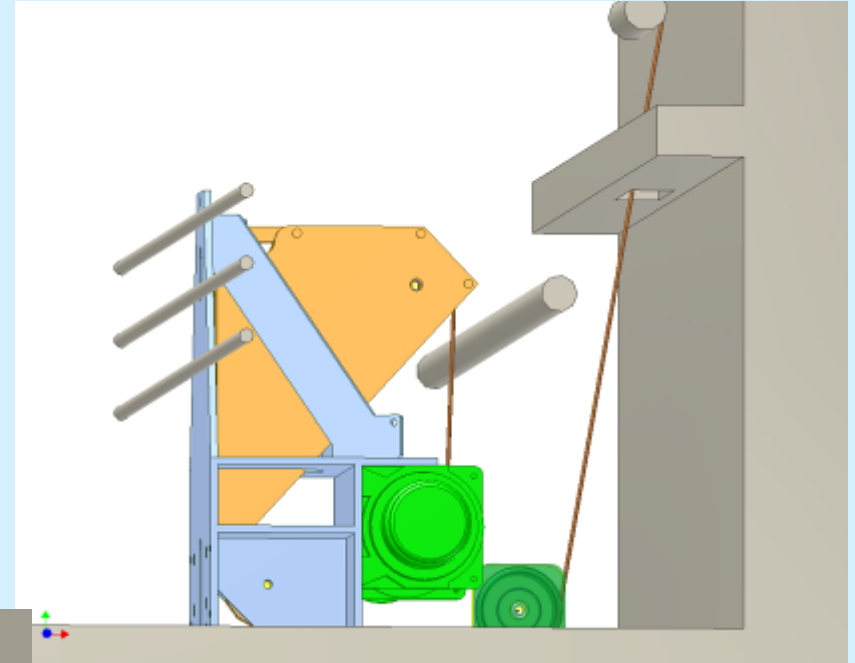
North Side pin

Limit switch

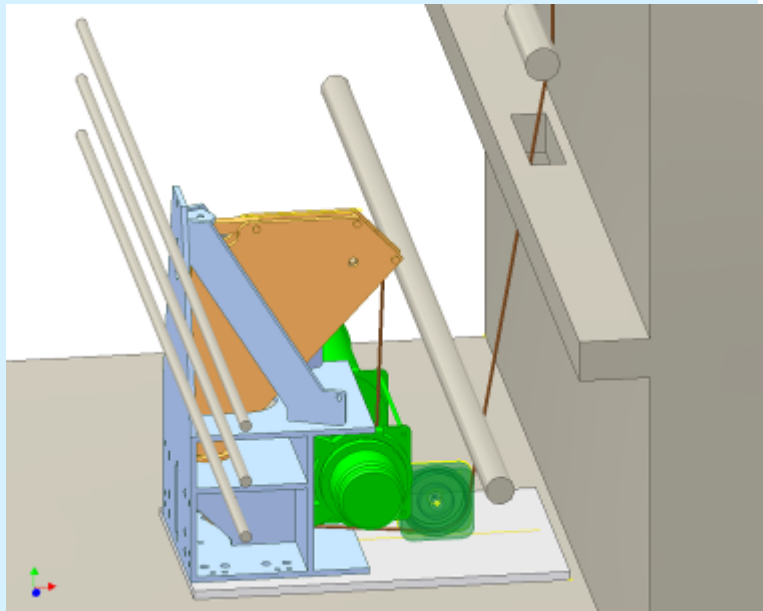
Window Washer Remote Pin Removal and Winch/spooler safety upgrades



Minimum angle from winch: Need clearance between 1 and 2 inches from wall



Maximum angle from winch: Need clearance between 1 and 4 inches from wall



2/28/2013

HVAC Rack Room Controls

TECHNICAL SUPPORT 2013

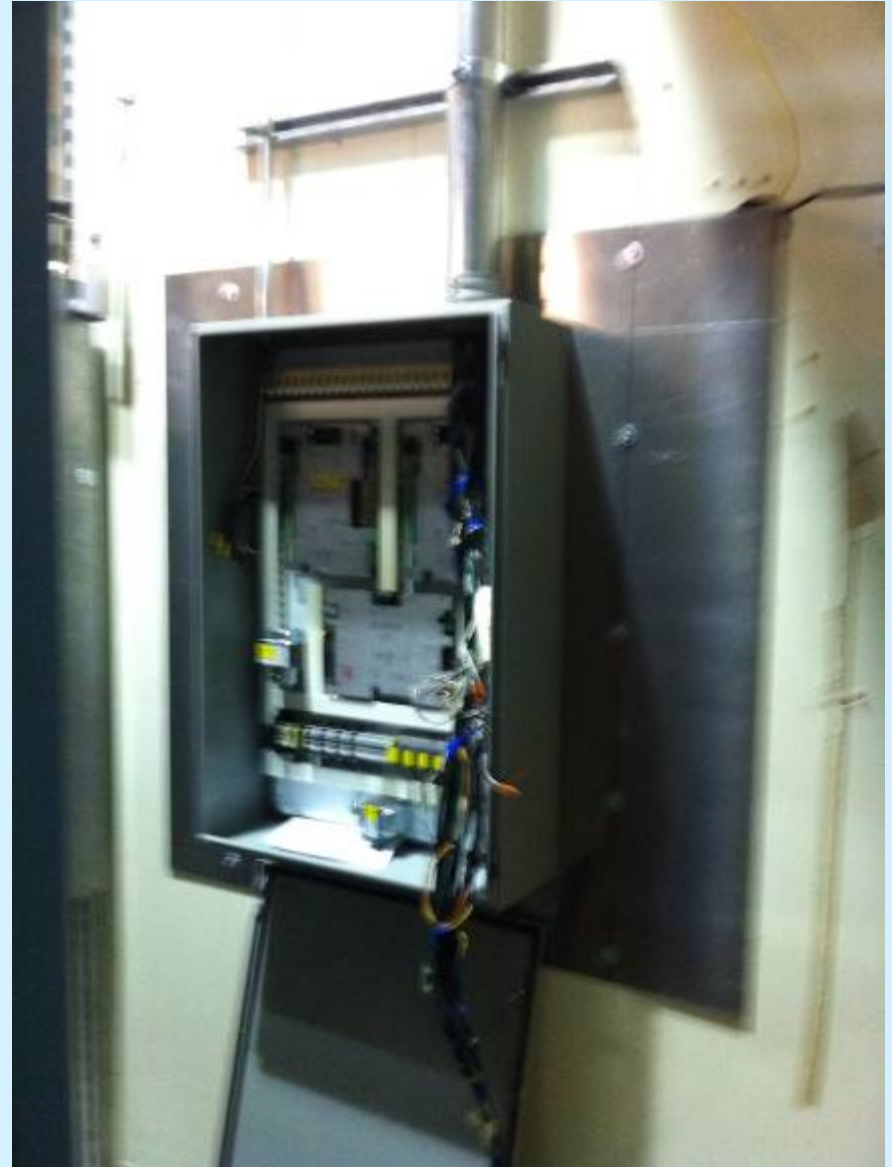


The two 10 ton units will have their Trane controls replaced with Automated Logic Corp. (ALC) controls.

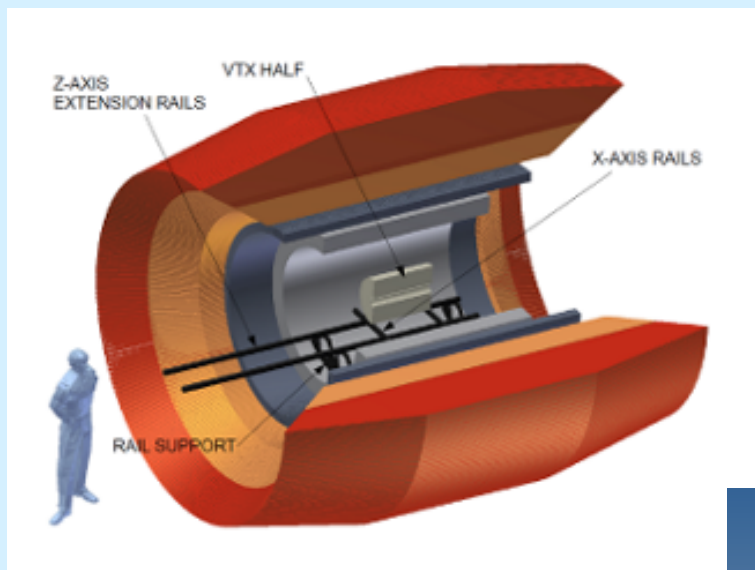
Both units will be out of service during modification work for two weeks (in progress). Rack Room winter heat loads will be handled by the 30 ton and floor unit during this time.

Engineering work is in progress to eventually upgrade the 30 ton roof mounted unit controls and IR HVAC controls.

TECHNICAL SUPPORT 2013



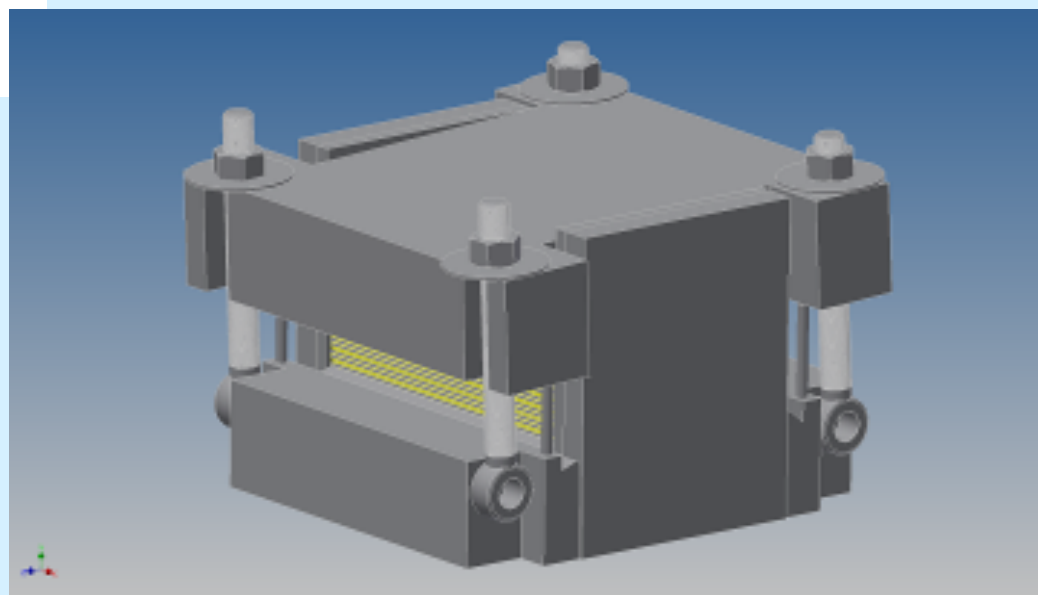
2/28/2013

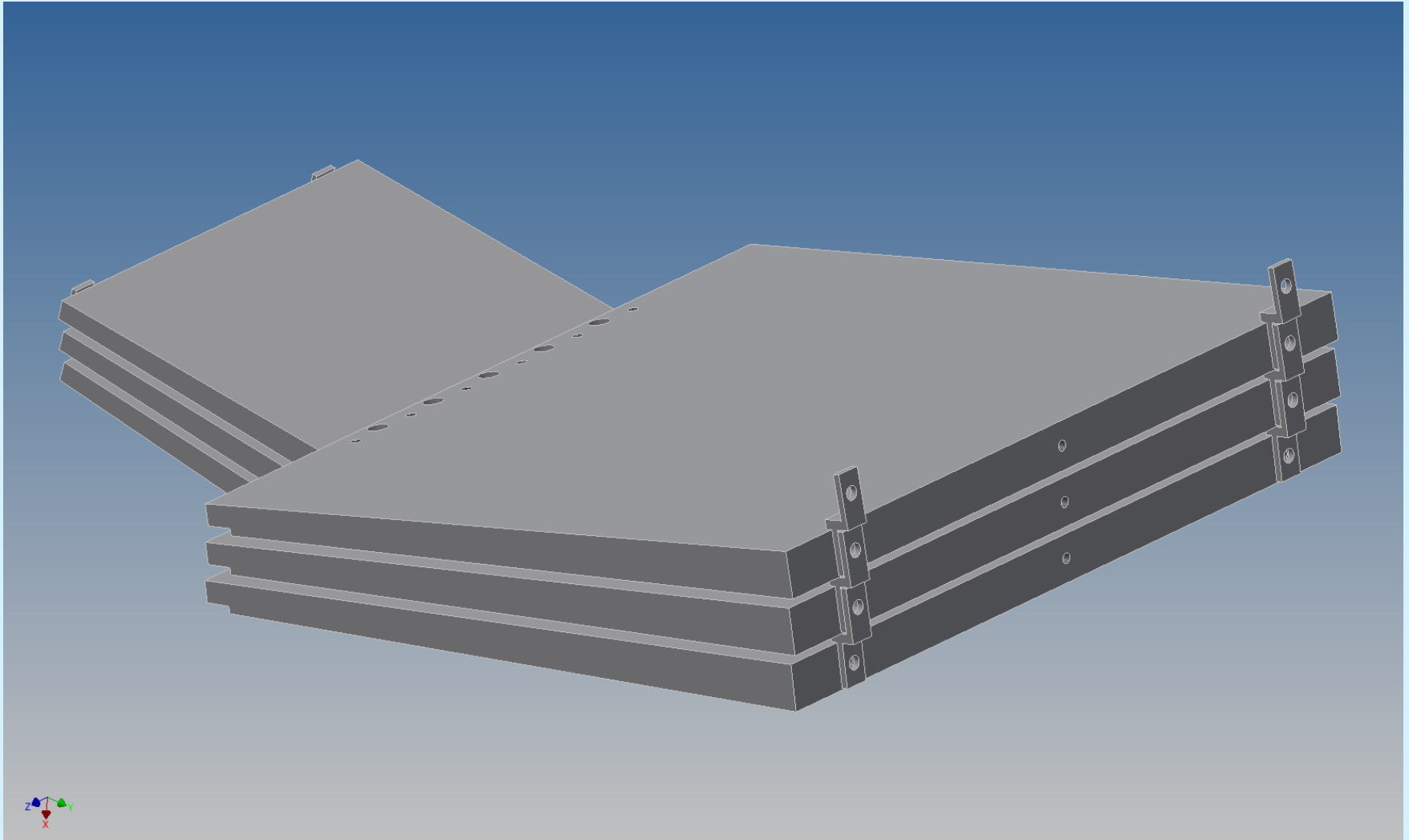


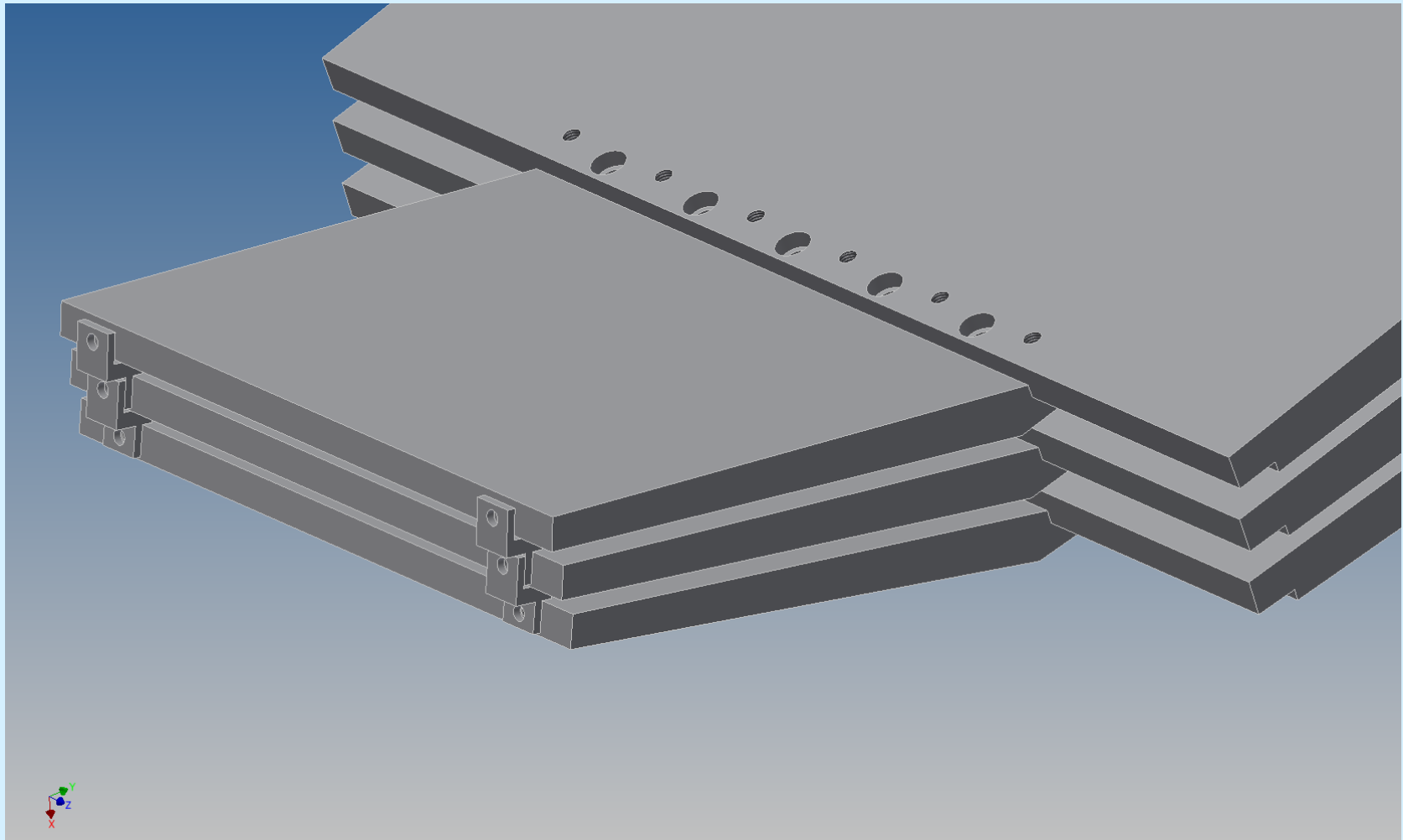
sPHENIX Proposed Upgrade

Work continues evaluating engineering tradeoffs for EMCal and HCal design, materials, etc.

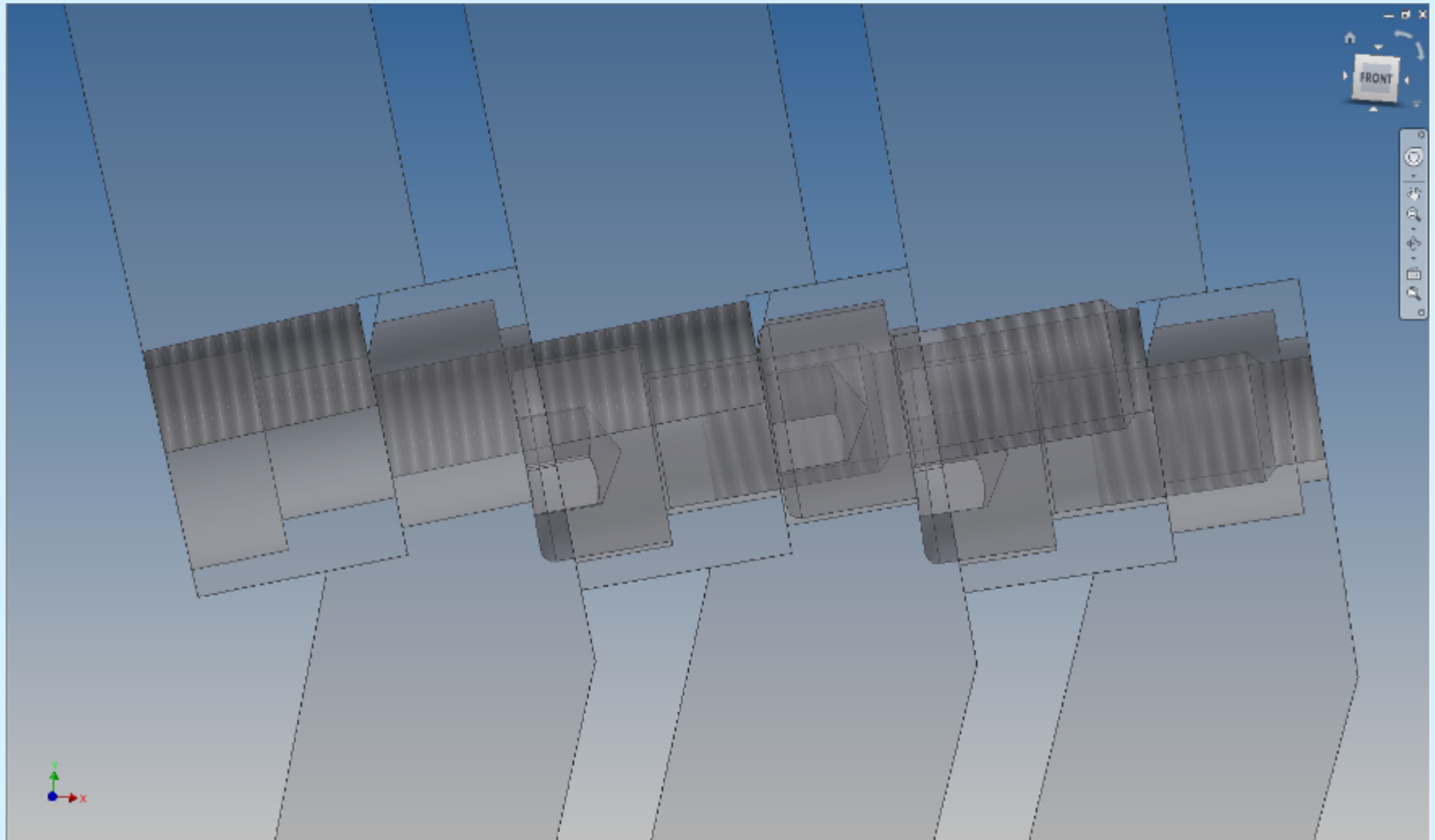
Prototype HCal and EMCal in progress

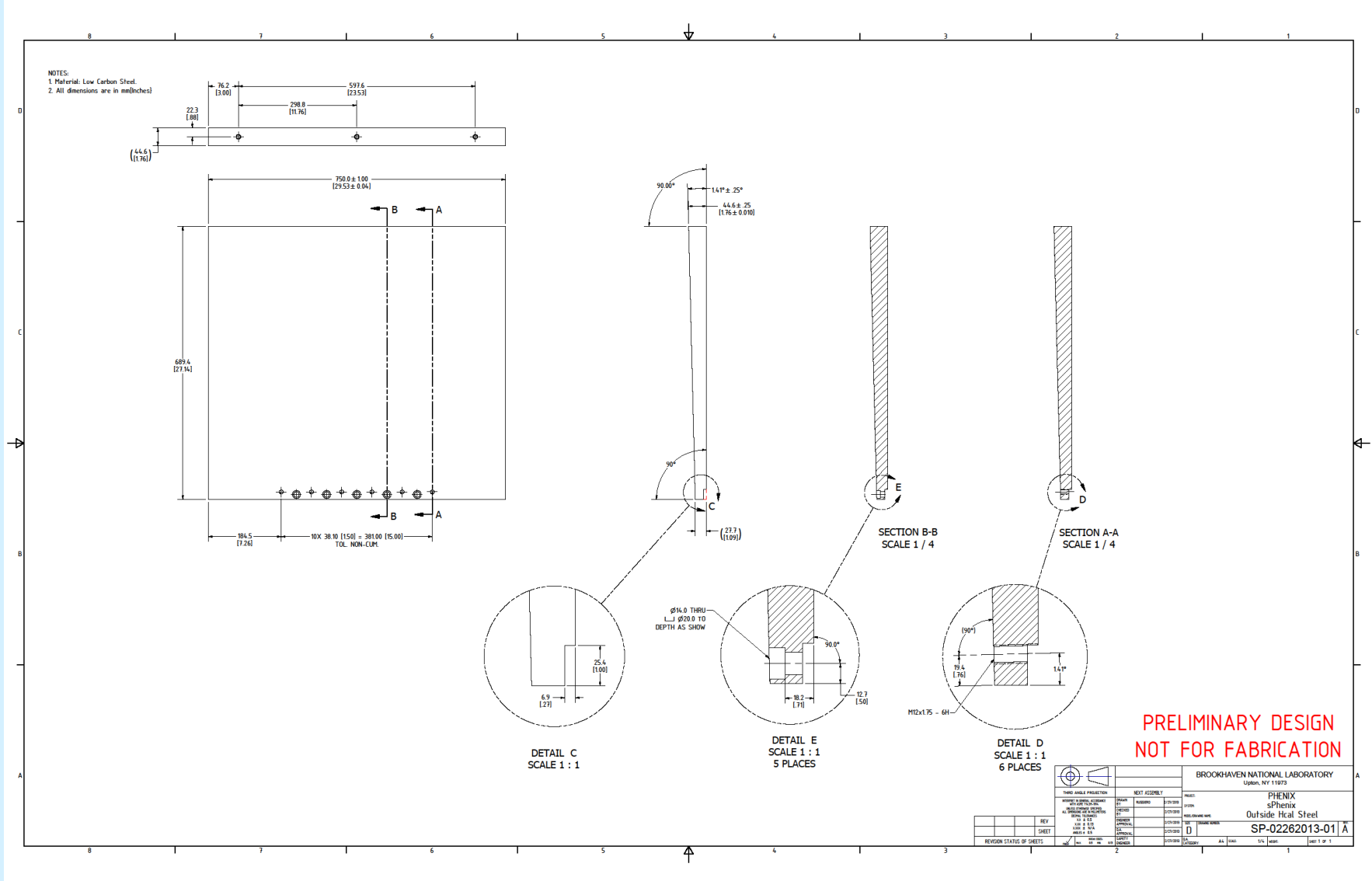




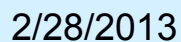


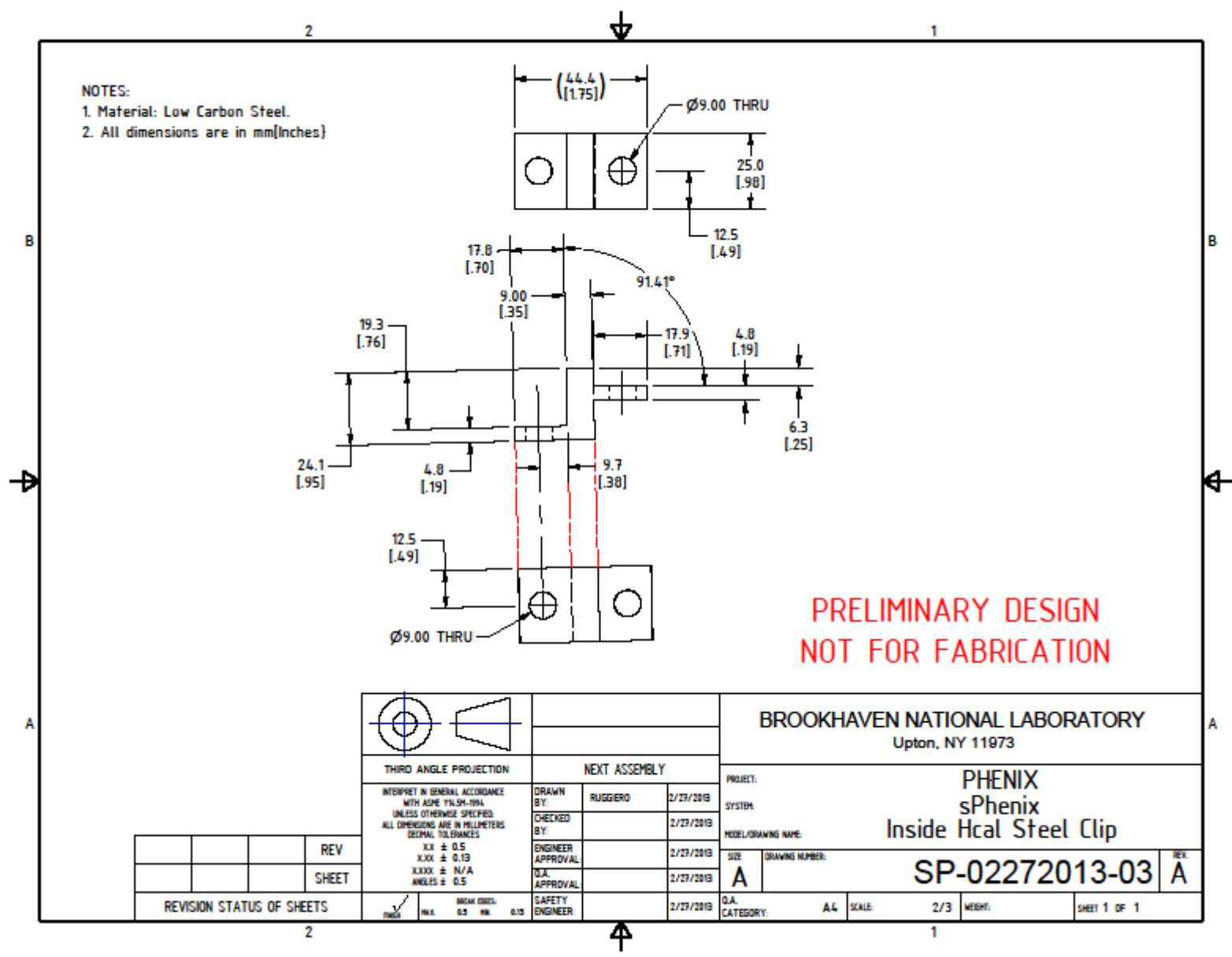
TECHNICAL SUPPORT 2013



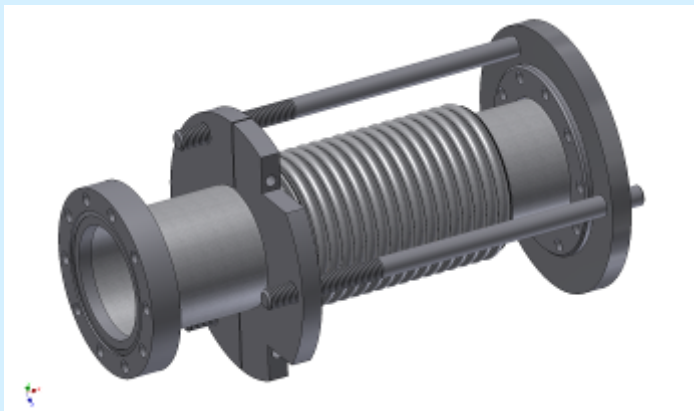




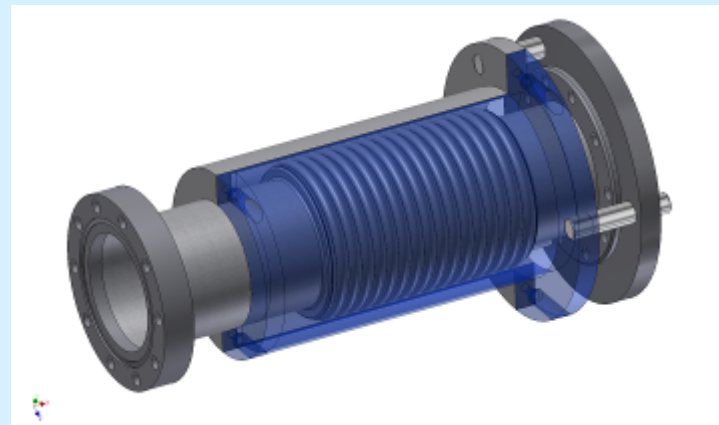




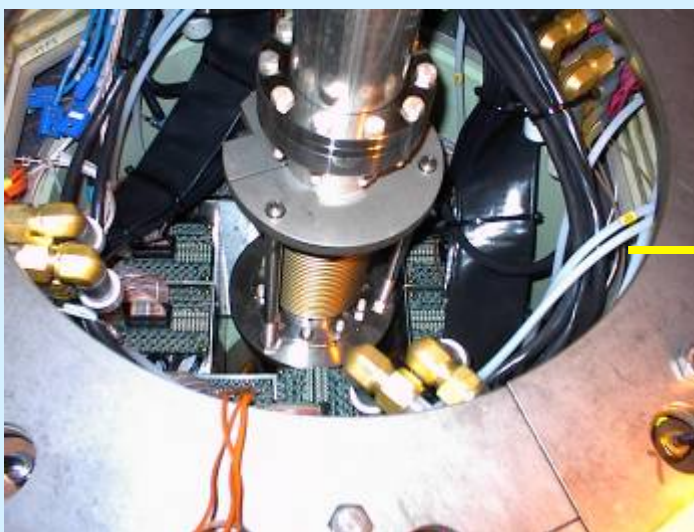




Existing vacuum bellows anti-squirm
In MPC S Cavity



Proposed vacuum bellows anti-squirm
In MPC S Cavity to accommodate MPC-Ex

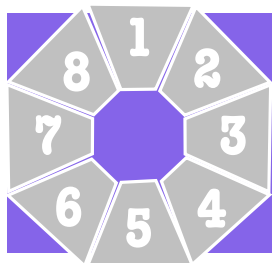


MPCS Flat cables replaced with round cables.

RPC1 Temperature

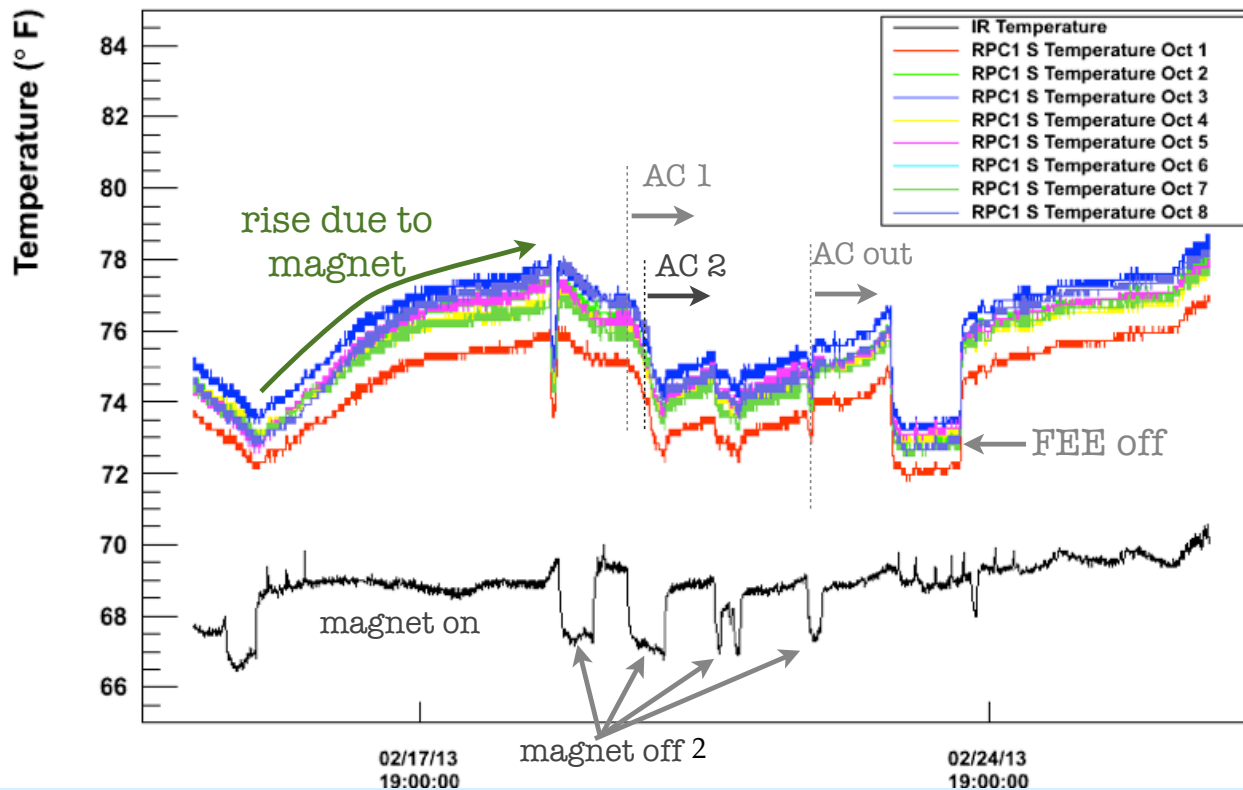
Francesca

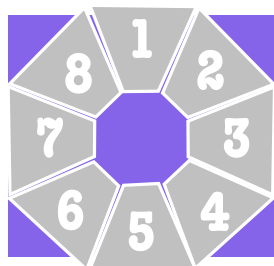
1



RPC1 South

PHENIX IR Temperatures





AC units on South

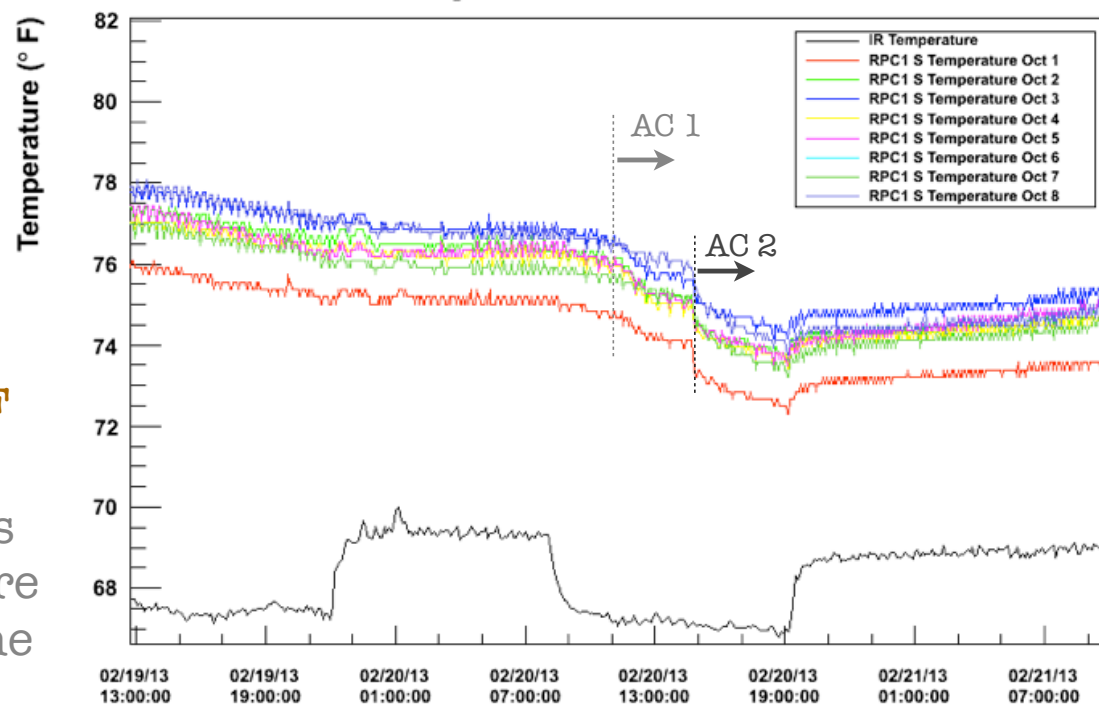
2/20 (~11am and ~3pm)

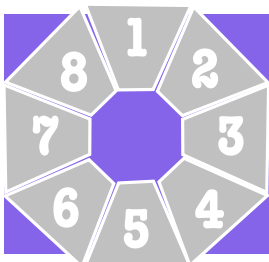
1 AC units
improved T by
~0.6-1.5 F

Both AC units
improved T by ~2 F

But the magnet was
switch off right before
the installation of the
first AC unit

PHENIX IR Temperatures

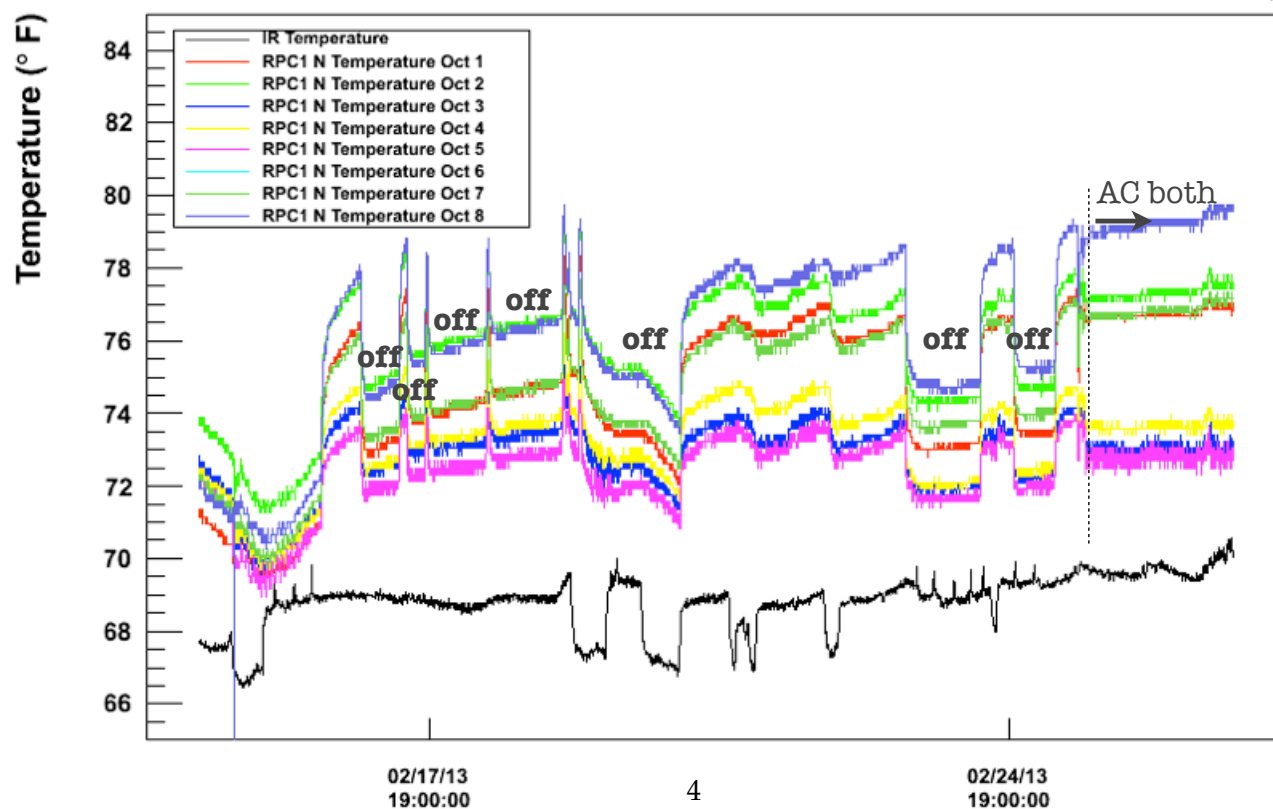


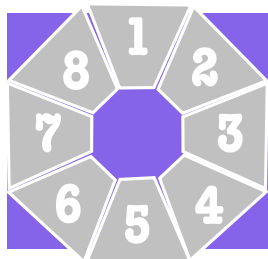


RPC1 North

PHENIX IR Temperatures

FEE off several times



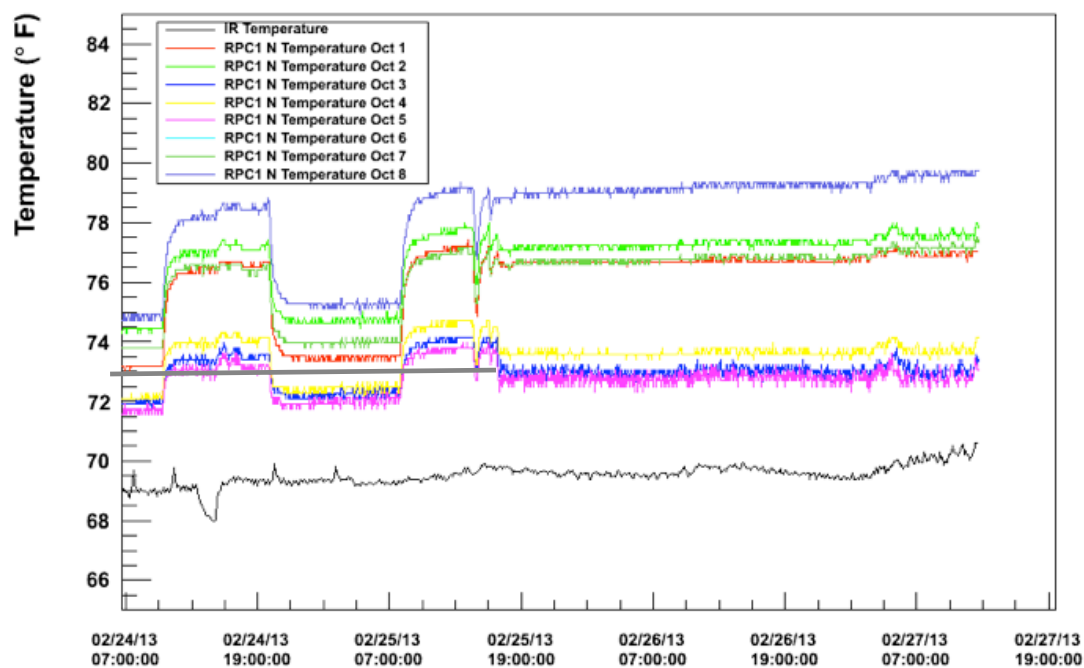


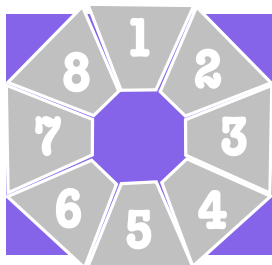
AC units on North

2/25 (~3pm)

When the magnet is on, 2 AC units improved T by ~ 1 F

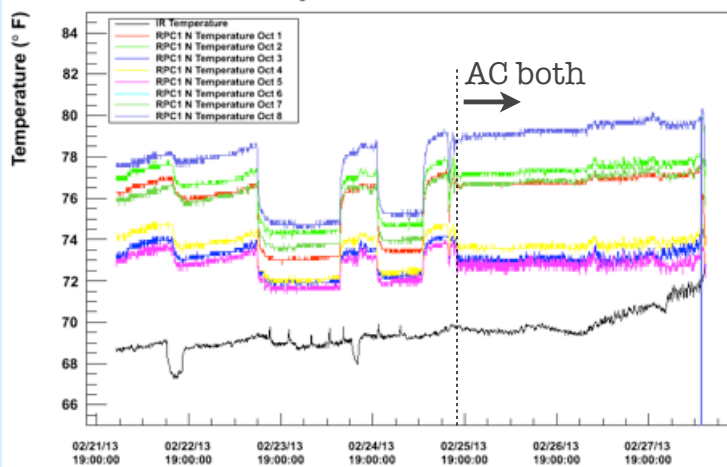
PHENIX IR Temperatures





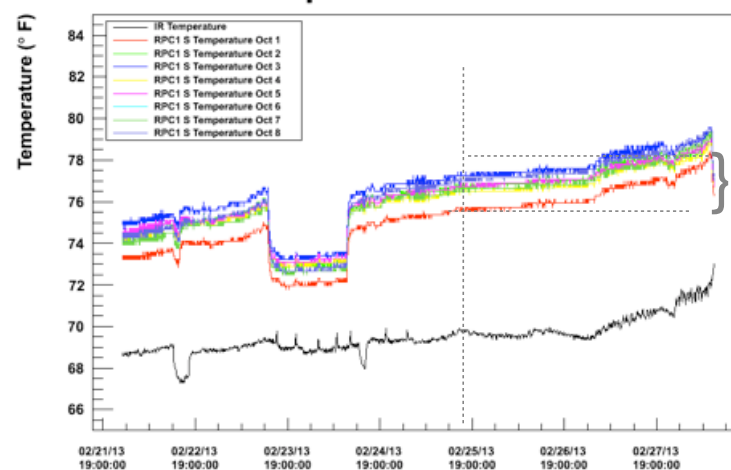
AC vs. No AC

PHENIX IR Temperatures North

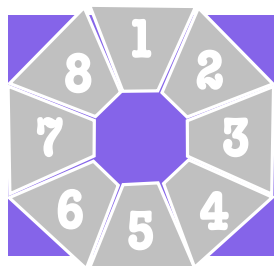


stable
(< 0.5 F change)

PHENIX IR Temperatures South

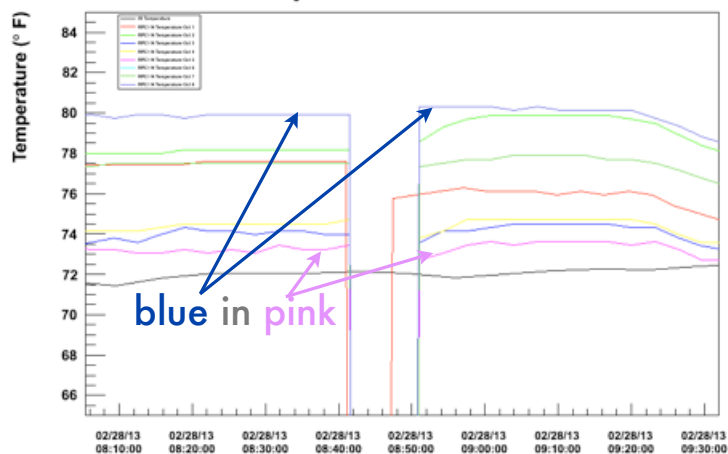


2.5 F

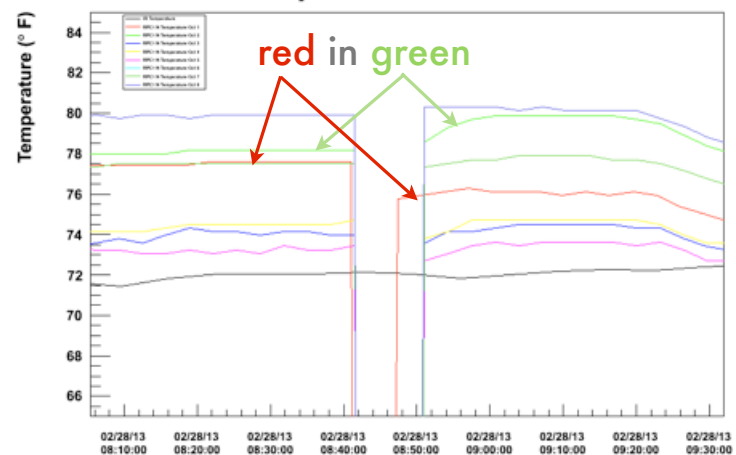


Channel swapping

PHENIX IR Temperatures



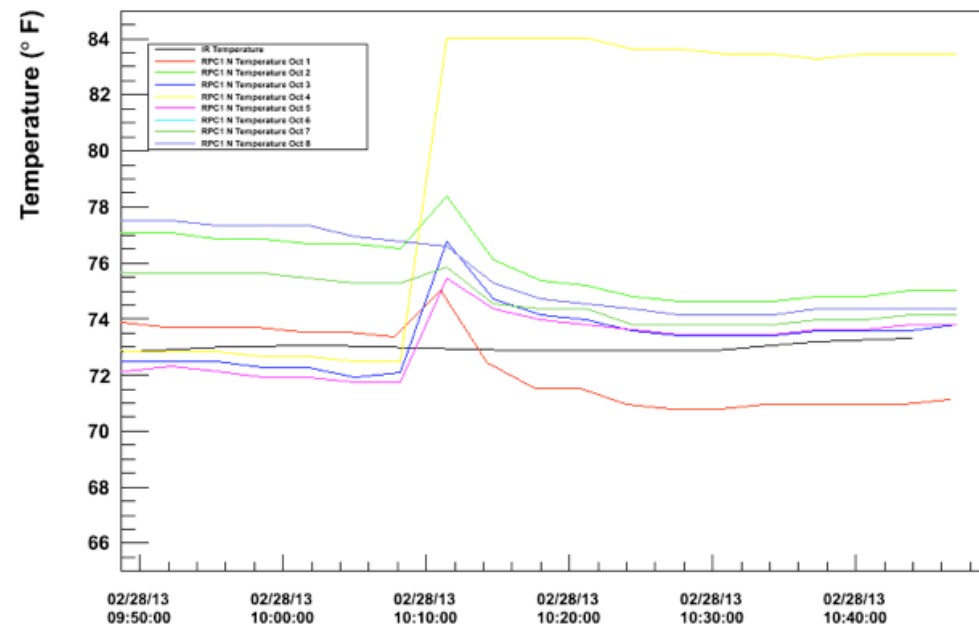
PHENIX IR Temperatures

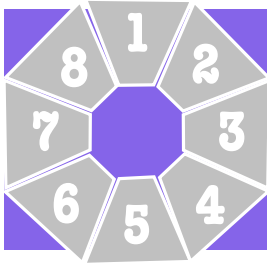


Reading spare thermocouples

Precise thermometers give 22.6 C, the thermocouples read values in a range from 21.85 to 28.59 C.

PHENIX IR Temperatures





Summary

- AC units help the temperature to stay stable despite the magnet being on for several days
- IR temperature increased in the last couple of days: what happened?

2013 Shutdown Schedule

TECHNICAL SUPPORT 2013

Prep for 2013 shutdown	2/11-6/30/2013
Design, Fabricate MPC-Ex	
Define tasks and goals	
Analysis and design of fixtures, tools and procedures	
Fabricate/procure tools and fixtures	
Tests, mockups, prototypes	
Receive, fabricate, modify, finish installables	
Review and approval of parts, tools, fixtures and procedures	
Assembly and QA tests	
End of Run Party	6/28/2013
Run 12 Ends	6/30/2013
Shutdown Standard Tasks	6/30-7/19/2013
• Open wall, disassemble wall, Remove MuID Collars,	
• Move EC to AH, etc.	
Disassemble VTX/FVTX services	7/1-7/19/2013
July 4 th Holiday	7/4/2013
Remove VTX/FVTX and transport to Chemistry Lab	7/22/2013
Assemble, Test and Install MPC-Ex (North only?)	7/22-10/1/2013
Summer Sunday (8/5) Prep and teardown	8/1-8/??/2013
Other detector maintenance as required	As required
Infrastructure maintenance as required	As required
TBD prototype tasks	As required
Summer Sunday (RHIC)	8/??/13

TECHNICAL SUPPORT 2013

Labor Day Holiday	9/2/2013
Repair upgrade, reassemble VTX/FVTX	7/23-10/13/2013
Test, survey (at Chemistry and IR) and re-install VTX/FVTX	10/16-10/27/2013
Pre-run commissioning and prep for run 14	11/1-12/31/2012
Prep for EC roll in	11/1-11/9/2013
Roll in EC	11/10-11/12/2013
Prep IR for run	11/1-11/30/2013
Pink/Blue/White sheets	12/14-12/31/13
Start run 14	1/1/2014

1. PHENIX Annual Safety Review: action items
 - PHENIX to provide C-AD with a plan for continued use of the RPC factory (O'Brien, Lynch Feb 15, 2013)
 - Provide documentation on the upgraded NOVEC gas system (Pisani Feb 15, 2013)
 - Provide an assessment of the new gas system software, what QA rating and proposed configuration control (Pisani Feb 15, 2013)
2. Performance goals due today?
3. From Ray Karol: A Kubota slipped on icy dirt near B1006A last week. Luckily the driver was not injured. An investigation of why the Kubota tipped over onto its side is continuing. Remember driving on ice with any vehicle should be avoided, especially with Kubota's.



No Injury/Safety Report This week ?



Where To Find PHENIX Engineering Info

Run 13 Plan:

*Damn The sequestration
Full Speed Ahead !*



http://www.phenix.bnl.gov/WWW/INTEGRATION/ME&Integration/DRL_SSint-page.htm

